

## EXPLANATION OF THE PLATES.

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3. Notes on *Brachyurus calvus*. By FRANK E. BEDDARD,  
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## (Plate XII.)

The accompanying drawing (Plate XII.) represents the external characters of the male *Brachyurus calvus* which died in the Society's Gardens on July 21 last year. I have taken the opportunity of comparing the structure of this species with the closely-allied *B. rubicundus*, which has been carefully described by Forbes in his memoir on the Ouakari Monkeys<sup>1</sup>.

The genus *Brachyurus* contains three species<sup>2</sup>, of which two, viz. *B. calvus* and *B. rubicundus*, agree very closely in external characters, and, as I shall presently show, in internal structure; while the third, *B. melanocephalus*, differs more in external characters from the other two than they do from each other.

Mr. Forbes has given a detailed account of the external characters of *B. rubicundus*, and the main external characters of all the species are referred to by Schlegel<sup>3</sup>. The general coloration of the back is a whitish grey, produced by a mixture of white and black hairs, the white predominating; passing from the dorsal to the ventral surface

<sup>1</sup> P. Z. S. 1880, p. 627.

<sup>2</sup> Schlegel " *Pithecia alba* " was believed by Mr. Forbes to be identical with *B. calvus*.

<sup>3</sup> Muséum des Pays-Bas, 1876, p. 227 *et seq.*

the colour gradually assumes a fulvous-brown tint, the brown being darker in the pectoral region, where the brown hairs are very numerous, only a few white hairs being interspersed among them. The brownish tinge is also conspicuous on the arms, legs, and tail, particularly on the tail, on the posterior aspect of the thighs, and at the wrist and ankle. The top of the head is a greyish colour, gradually passing into brown anteriorly and at the sides, as in *B. rubicundus*; the hairs on the throat also resemble that species in their dark brown colour, and in being mixed with numerous black hairs; the general tint of the hair on the throat is a rich chestnut-brown, and is exactly similar to that of *B. rubicundus*.

With regard to the osteology, I find that the number of vertebræ in my specimen is C. 7, D. 13, L. 6, S. 4, Cd. 15, of which the last three are very minute and apparently ankylosed together. Forbes states in his paper that in *B. melanocephalus* there are 19 or 20 caudal vertebræ, on the authority of a specimen belonging to that species in the National Collection. The specimen in question (806 *b*) has certainly the 20 caudal vertebræ that Forbes has mentioned; but it does not present any recognizable differences from *Brachyurus calvus*, and indeed is entered in the Catalogue as belonging to that species.

It is not necessary to give much account of the visceral anatomy of this species, inasmuch as I have been unable to find any marked points of difference from *B. rubicundus*; the alimentary viscera presented a very close correspondence in the two species, as will be evident from the following notes.

The *tongue* resembles in every particular that of *B. rubicundus*, and, curiously enough, even the arrangement of the circumvallate papillæ corresponds in the two species. The correspondence is curious, because Mr. Forbes's description of the circumvallate papillæ reads almost as if he were referring to an abnormal condition. The circumvallate papillæ in the two species are disposed in the usual V-shape, but there is an additional papilla on the right side between the apical and basal papillæ, thus destroying the symmetry of the arrangement. In a specimen of *Macacus rhesus*, to which I am able to refer at the moment of writing, there are also four circumvallate papillæ; two are situated side by side, and symmetrically at the apex of the V, while the two others occupy the usual position.

*Cæcum*.—The cæcum measured 10 inches along the greater curvature; it is separated from the colon by a very marked constriction; it is not sacculated, and when fully distended with air was curved on itself into a little less than a circle; it is furnished with a well-developed median frenum which carries blood-vessels.

In examples of two species of *Callithrix* and in a *Pithecia* I have noted an identical structure in the cæcum.

The origin of this peritoneal fold is not exactly in the middle line at the lower extremity of the ileum, and the blood-vessel passes on to it over one side of the base of the ileum; the blood-vessel in fact exactly corresponds to that which is borne by one of the lateral folds in *Hapale*.

In *Hapale jacchus* the cæcum distended with air, dried and varnished, showed three folds of peritoneum running along its upper surface, as described by Prof. Flower<sup>1</sup> in *Ateles*; the *frenum* or median band is extremely short and bears no blood-vessel. The lateral folds arise precisely as is indicated by Prof. Flower, but one of them is much longer than the other and reaches nearly to the end of the cæcum, while the other does not reach so far as does the median frenum.

In *Midas rufimanus* a spirit-specimen of the cæcum showed the same three folds, which were, however, partially united together into an apparently single fold; this was easily separable into three layers—a median fold without blood-vessels, and two lateral folds, each bearing a blood-vessel.

#### 4. List of Mammals from the Cameroons Mountain, collected by Mr. H. H. Johnston<sup>2</sup>. By OLDFIELD THOMAS.

[Received January 4, 1887.]

In order to complete the list of the zoological specimens collected by Mr. H. H. Johnston, I have been asked to contribute the names of the two Mammals he obtained. They are as follows:—

##### 1. ANOMALURUS BEECROFTI, Fraser.

a. Skin and skeleton, ♂. Cameroons Mountain, 8000 feet.

##### 2. MUS UNIVITTATUS, Peters.

a. Skin, ♀. Cameroons Mountain, 8000 feet.

<sup>1</sup> Med. Times and Gazette, 1872.

<sup>2</sup> [Mr. Johnston's narrative of his ascent of the Cameroons Mountain last year, during which the collections described in this and the following communications were made, will shortly appear in the 'Graphic' with illustrations. Setting out from Victoria, opposite his residence on Mondole Island, Mr. Johnston proceeded by Bonjongo and Mapanja (3000 feet alt.) to Mann's Spring, where he encamped at an altitude of 7350 feet. Here the temperature ranged from 56° to 60° Fahr., and for the first week of his stay he lived in a perpetual rainfall. The forest-region ceases at about 7000 feet, and gives place to grassy downs, dotted with patches of woodland and varied by huge isolated boulders of rock and ancient lava-flows. Here a corresponding change in the flora and fauna takes place. Mr. Johnston tells us:—

"Mann's Spring is a favourite resort of birds, who alway affect the vicinity of water, and here especially they make the air musical with their twittering songs and mellow love-calls. As man is a rare visitant here, the birds are very bold and fearless, and appeared to welcome our coming for the chance scraps of food thrown in their way. Alas! they soon had to rue their over-confidence. They had put themselves in the power of one whose natural tender-heartedness and love of living things are overborne by his interest in science. Of all the pretty bird-forms which came to drink and sport and bathe by the brooklet, or which hovered about the balsam-blossoms, some of every kind must die to illustrate the ornithology of the Cameroons. And so my native collector and I were soon